SONY®

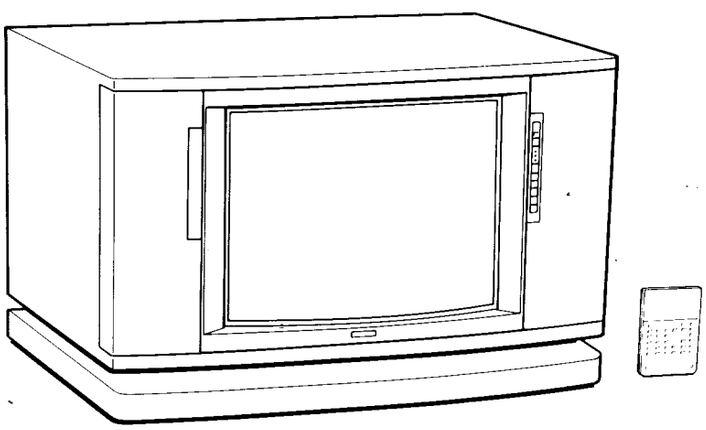
4-482-554-23 (1)

TRINITRON® COLOR TV

KV-32CX10

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.



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Owner's Record

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. KV-32CX10 Serial No. _____

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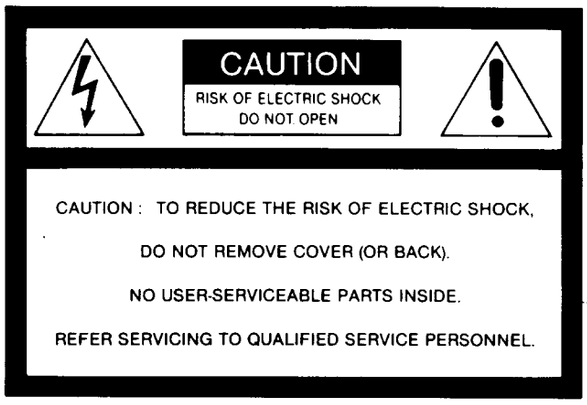
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Precautions

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

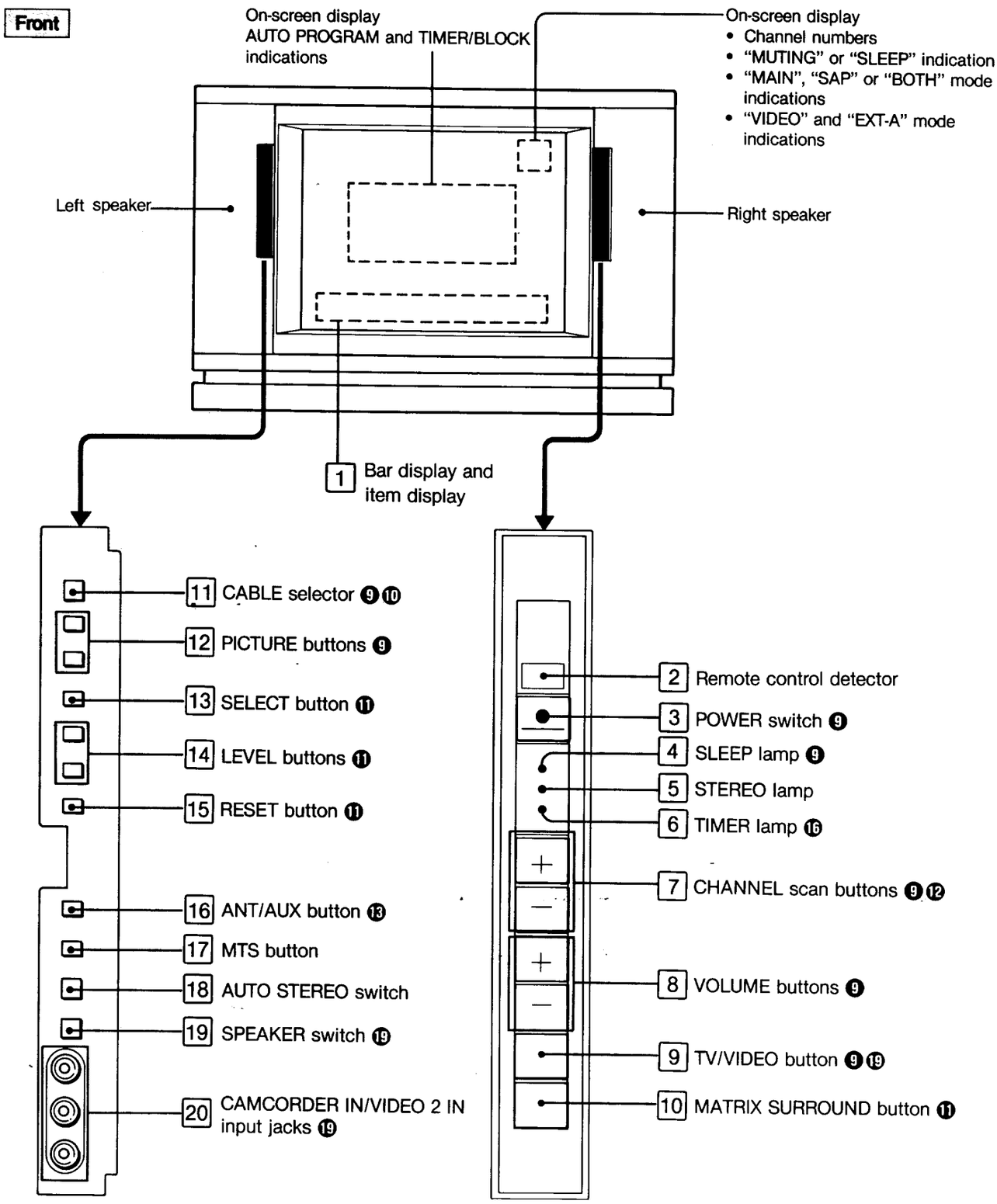
Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Features

- **S VIDEO INPUT jack** which is connected to the S video output jack on the VCR to allow superior pictures from the VCR to be displayed on the TV screen.
- **New Microblack™ Trinitron picture tube** for a high resolution and high contrast picture.
- **Multi-band VHF/UHF/CATV tuner** receives up to 125 cable channels for a total of 181 possible off-air and cable channels.
- **Matrix surround** for live sound reproduction.
- **Built-in MTS (Multichannel TV Sound)** for the reception of a stereo program and/or second audio program (SAP).
- **Remote commander** for operating both the TV and a VCR from a distance.
- **Automatic programming** enables presetting of all receivable channels with a press of a button.
- **Timer/Block** for automatic program starting and channel blocking.
- **Sleep timer** automatically turns off the TV after approximately one hour.
- **Built-in video input jacks** allow direct hook-up to up to three VCRs and/or other optional equipment.
- **Jump button** enables to switch quickly between two channels.
- **On-screen display**
- **External audio jacks** allow listening to the sound from a connected audio equipment.
- **Variable audio output jacks** are convenient for the reproduction of TV or video sound through an audio system.
- **Monitor output jacks** allow VCR recording of the picture and sound being monitored on the TV.
- **ANT/AUX button** on the Remote Commander permits one-touch selection of pay cable TV when a convertor is connected.
- **New Dynamic Color™ system** assures accurate, life-like skintones and pure whites.
- **New Dynamic picture™ system** adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene.
- **Colorpure Filter™** produces fine picture detail without color spill or color noise.
- **A/V WINDOW buttons** on the Remote Commander enables the picture and sound to be adjusted from a distance.
- **VM (VELOCITY MODULATION) circuitry** produces clean and sharp black and white contrasts.
- **Dynamic Focus™ circuitry** automatically focuses the scanning electron beam for enhanced sharpness over the entire picture, especially in the corners.

Location and Function of Controls

Refer to the page indicated in ● for details.


Front
On-screen display
AUTO PROGRAM and TIMER/BLOCK indications
On-screen display
• Channel numbers
• "MUTING" or "SLEEP" indication
• "MAIN", "SAP" or "BOTH" mode indications
• "VIDEO" and "EXT-A" mode indications
Left speaker
Right speaker
1 Bar display and item display
11 CABLE selector ❾❿
12 PICTURE buttons ❾
13 SELECT button ⓫
14 LEVEL buttons ⓫
15 RESET button ⓫
16 ANT/AUX button ⓭
17 MTS button
18 AUTO STEREO switch
19 SPEAKER switch ⓳
20 CAMCORDER IN/VIDEO 2 IN input jacks ⓳
2 Remote control detector
3 POWER switch ❾
4 SLEEP lamp ❾
5 STEREO lamp
6 TIMER lamp ⓰
7 CHANNEL scan buttons ❾⓬
8 VOLUME buttons ❾
9 TV/VIDEO button ❾⓳
10 MATRIX SURROUND button ⓫

[1] **Bar display**
Indicates picture or sound level setting. Also the matrix surround mode indication is displayed here.

[2] **Remote control detector**
Point the Remote Commander towards this detector.

[3] **POWER switch**
Press to turn the unit on. Press again to turn the unit off.

[4] **SLEEP lamp**
Lights up when the SLEEP button on the Remote Commander is pressed. This lamp also lights up for approx. 17 seconds when the power is turned on.

[5] **STEREO lamp**
Lights up when a stereo broadcast is received with the AUTO STEREO switch set to ON.

[6] **TIMER lamp**
Lights up to indicate that the program start timer has been set.

[7] **CHANNEL scan buttons**
Press "+" for higher-numbered channels or "–" for lower-numbered channels.

[8] **VOLUME buttons**
Press "+" to increase volume or "–" to decrease it.

[9] **TV/VIDEO button**
Press to monitor the picture or sound coming in through the VIDEO input jacks. Each press on the button changes the mode as follows:

VIDEO 1 → VIDEO 2 → VIDEO 3 → EXT-A → TV

[10] **MATRIX SURROUND button**
Press to activate matrix surround. Press again to deactivate it.

[11] **CABLE selector**
Set to ON to view cable TV programs. Set to OFF to view VHF or UHF programs.

[12] **PICTURE buttons**
Press "+" to increase picture contrast or "–" to decrease it.

[13] **SELECT button**
Press to select items to adjust picture and sound.

[14] **LEVEL buttons**
Press +/– to adjust the selected item.

[15] **RESET button**
Press to restore the factory preset picture and sound values.
To adjust these values manually, use the A/V WINDOW buttons.

[16] **ANT/AUX (antenna auxiliary) button**
Press to select pay cable TV when a connector is connected.

[17] **MTS (Multichannel TV sound) button**
Press to receive a stereo program and/or second audio program.

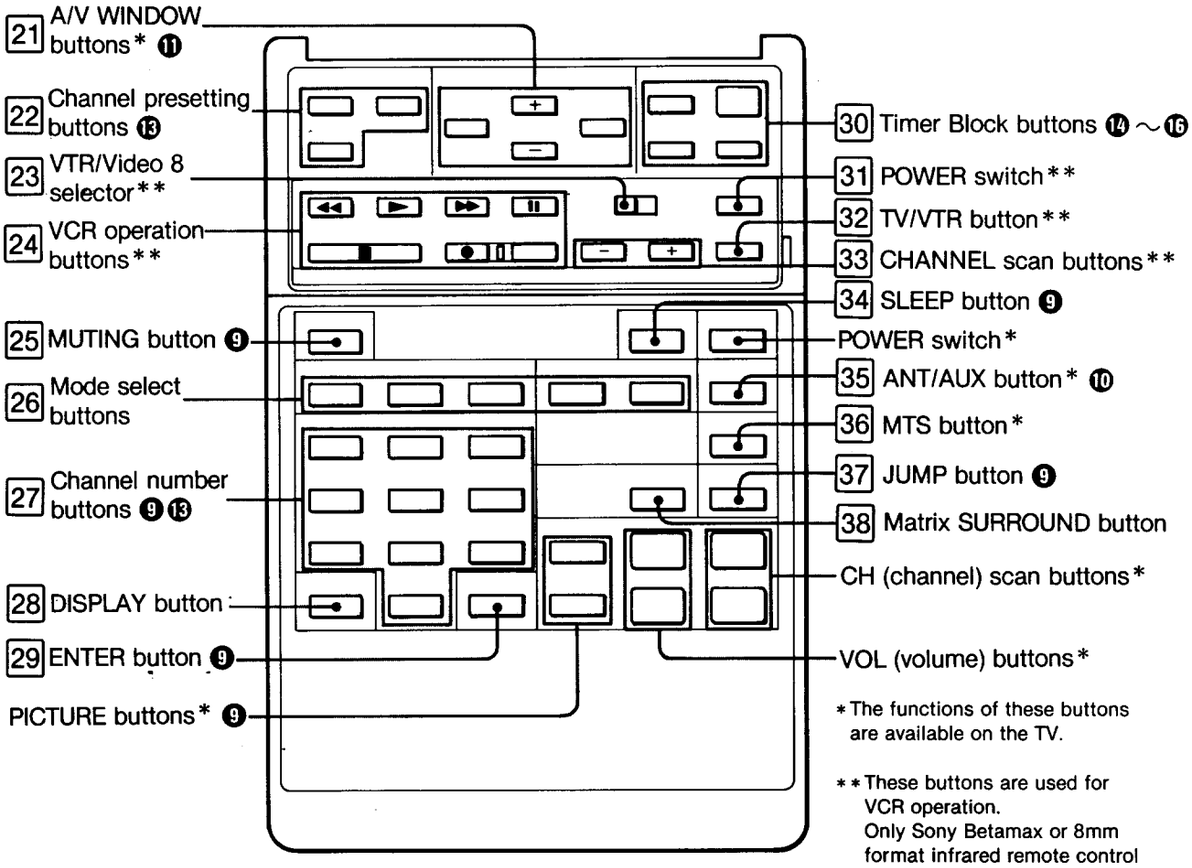
[18] **AUTO STEREO switch**
Normally set this switch to ON.
Set to OFF when excessive noise is heard during a stereo broadcast because of a weak signal. The sound becomes monaural but the noise should be eliminated.

[19] **SPEAKER switch**
Normally set this switch to ON. Set to OFF when connecting an audio system to the AUDIO OUTPUT jacks.

[20] **CAMCORDER IN/VIDEO 2 IN input jacks**
Connect to the video and audio output jacks of a portable VCR (e.g. Video camera recorder), video disc player, etc.

Remote Commander RM-755

Refer to the pages indicated in ● for details.

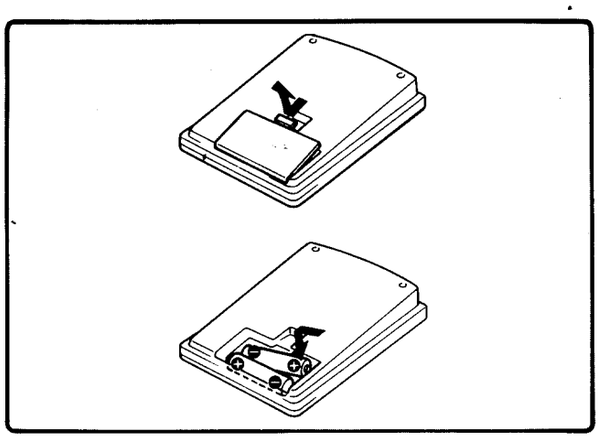


*The functions of these buttons are available on the TV.

**These buttons are used for VCR operation.
Only Sony Betamax or 8mm format infrared remote control VCRs can be operated with these buttons.

Battery installation

Install two size AA (R6) batteries in the battery compartment with the correct polarity.



Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries when the Commander will not be used for a long time.
- Be sure that there are no obstructions between the Commander and the unit.
- Operable range is limited.
- If this Remote Commander is used to operate another TV, the TV may not operate properly.

21 **A/V WINDOW buttons: SELECT, LEVEL RESET**
Used to adjust picture and sound.

22 **Channel presetting buttons: AUTO PROG, ERASE, ADD**
Used for channel presetting.

23 **VTR/Video 8 selector**
Set to "VTR" to remote control Sony Betamax infrared remote control VCRs or to "Video 8" to control Sony 8mm format VCRs.

24 **VCR operation buttons**
Used to control operations of Sony VCRs.

25 **MUTING button**
Press to mute the sound immediately. Press again to restore the sound.

26 **Mode select buttons: TV, VIDEO1, VIDEO2, VIDEO3, EXT-A**
Press a button to monitor the picture or sound coming in through the VIDEO input jacks. Press TV to return to the TV mode.

27 **Channel number buttons**
Press the number, then ENTER to select a channel.

28 **DISPLAY button**
Press to keep the display on the screen.

29 **ENTER button**
Press after pressing the numerals to select channels.

30 **Timer Block buttons: TIMER, CLEAR, AM/PM, TIMER/ BLOCK**
Used to set the internal clock, program start TIMER and channel BLOCK.

31 **POWER switch**
Press to turn on the VCR. Press again to turn it off.

32 **TV/VTR button**
This button has the same function as that on the VCR. Press to watch the program selected on the recorder (VTR mode). Press again to watch a different TV program while recording another (TV mode).

33 **CHANNEL scan buttons**
Press "+" for higher-numbered channels or "–" for lower-numbered channels on VCR.

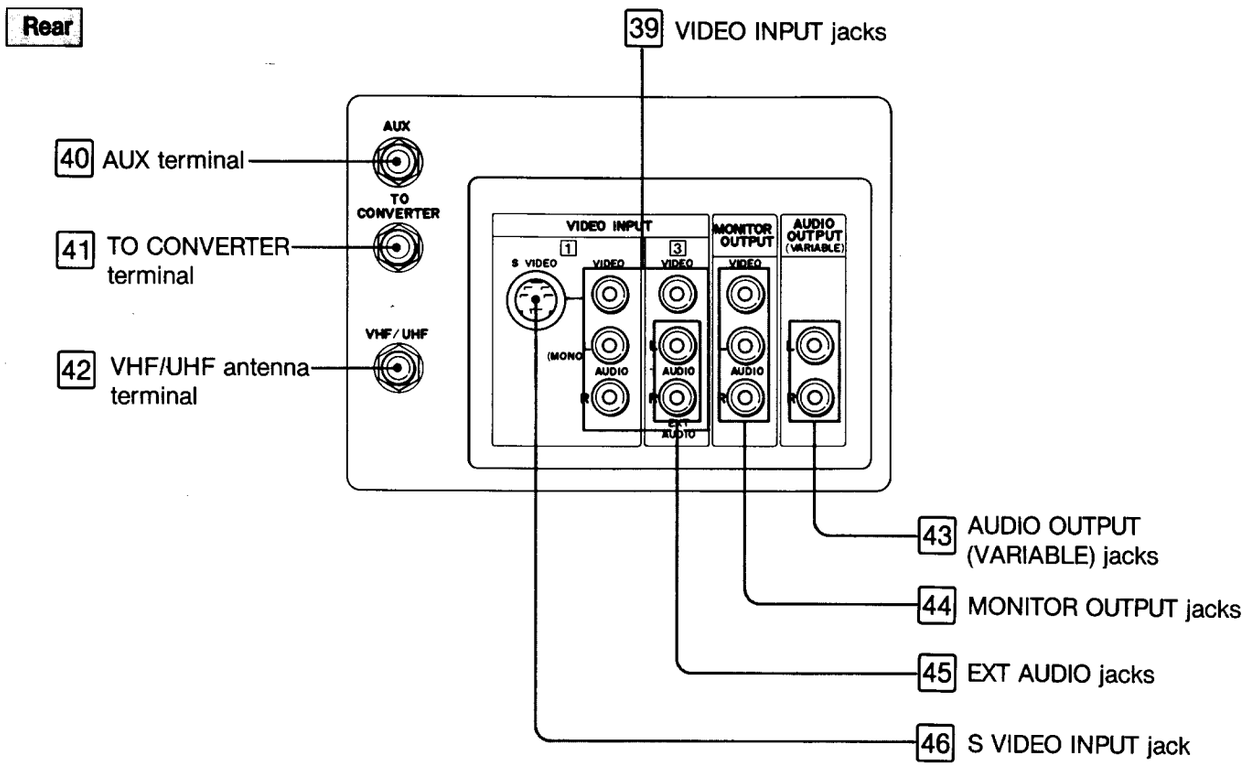
34 **SLEEP button**
Press to activate the sleep timer.

35 **ANT/AUX button**
To view pay cable TV programs, press to display "AUX on the screen. To view VHF, UHF or regular cable TV programs, press again so that "AUX " disappears.

36 **MTS button**
Used to listen to Multichannel TV sound broadcasts.

37 **JUMP button**
Press to recall the channel which was displayed directly before the one being tuned in.

38 **Matrix SURROUND button**
Press to activate matrix surround.



39 **VIDEO INPUT (1, 3) jacks (phono)**
Connect to the video and audio output jacks of a VCR, video disc player, etc.

40 **AUX terminal**
Connect the output of a special converter for pay cable TV reception.

41 **TO CONVERTER terminal**
Connect the input of a special converter for pay cable TV reception.

42 **VHF/UHF antenna terminal**
Connect an external antenna or a CATV cable.

43 **AUDIO OUTPUT (VARIABLE) jacks (phono)**
Connect an amplifier to monitor the sound through a stereo system.

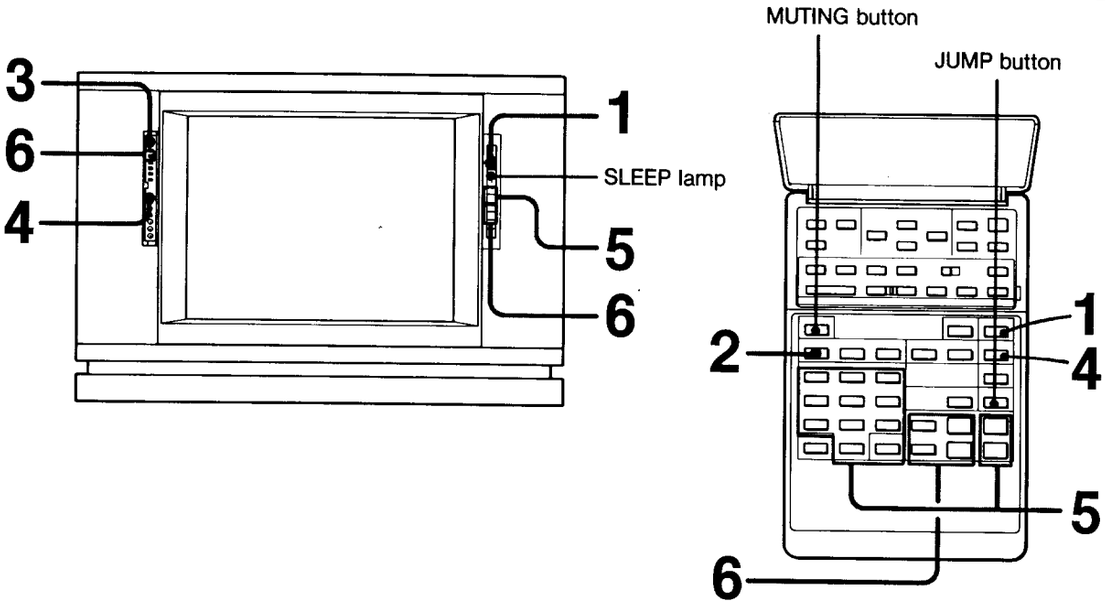
44 **MONITOR OUTPUT jacks (phono)**
Connect to the video and audio input jacks of a VCR or color monitor. Either the TV or VCR signal selected by the TV/VIDEO button is supplied.

45 **EXT (external) AUDIO jacks (phono)**
An external audio source can be connected to these jacks to be combined with the picture displayed on the TV. Connect to the audio/line output of the audio source.

46 **S VIDEO INPUT jack (4-pin mini DIN)**
Connect to the S video output jack of a VCR.

Operation

Seeing TV Program



1 Press POWER to turn on the TV.

2 If the "VIDEO 1", "VIDEO 2", "VIDEO 3", or "EXT-A" indication is displayed on the screen, press the TV button on the Remote Commander so that a channel number is displayed.

3 Set the CABLE selector
For VHF and UHF channels : OFF
For cable TV programs : ON

4 Press the ANT/AUX button as necessary.
For VHF, UHF and regular cable TV channels: the "AUX" indication should be off.
For pay cable TV channels: the indication should be displayed.

5 **Select channels in one of the following two ways.**
- Press the numeral(s) of the channel, then press ENTER.
  Example: To select channel 6, press 6 and ENTER.
  To select channel 125, press 1, 2, 5 and ENTER.
  If you pressed a wrong numeral, wait for a few seconds until it disappears. Then, try again.
- Press CH or CHANNEL "+" for higher-numbered channels and "–" for lower-numbered channels.

6 **Press VOL or VOLUME "+" or "–" to adjust the volume and PICTURE "+" or "–" to adjust the picture.**

To switch quickly between 2 channels, press JUMP.
Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enables you to keep track of two programs alternately.

To mute the sound, press MUTING.
The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +/–.

To turn off the unit, press POWER again.

To have the TV turn off automatically after 1 hour, press SLEEP.
The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off. To cancel the SLEEP timer, press SLEEP again so that the SLEEP lamp goes out, or turn off the TV.

Enjoying FM Simulcasted Programs

Over-the-air FM simulcasts

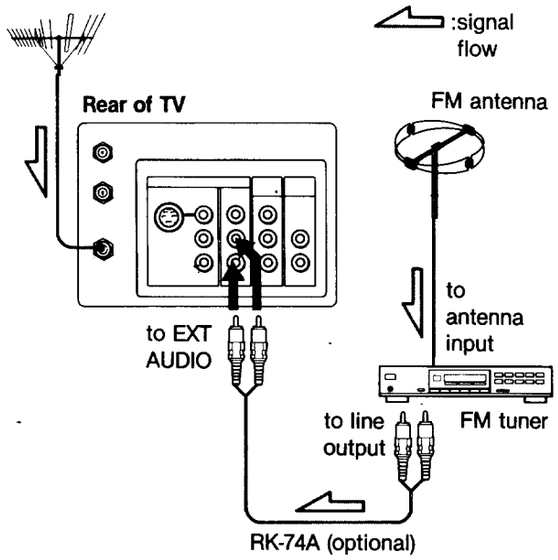
Sometimes a TV station and an FM radio station will broadcast a program simultaneously so that viewers can enjoy TV programs in high-fidelity stereo. The video portion of the program is viewed normally by selecting the correct channel and the audio portion is heard in stereo by tuning to the correct FM station of the user's FM tuner.

This TV featuring double-sided speakers has been equipped with External audio (L/R) jacks to allow the user to connect an FM tuner so that stereo simulcasts can be enjoyed on the TV's stereo speakers. Set-up is shown below.

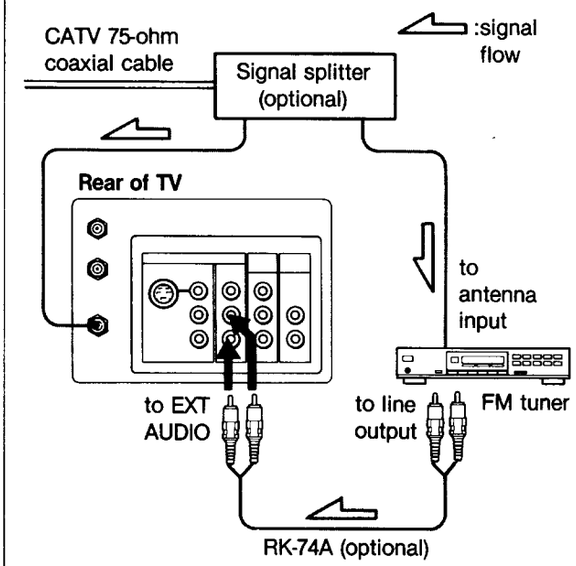
Over-the-cable FM simulcasts

Cable TV companies have also started "simulcasting" some channels like MTV (Music Television) and selected movies in stereo over the cable. In the case of cable stereo programs, however, the audio signal is not sent over the air but sent on FM frequencies over the cable. By splitting the incoming cable signal and running it to both the TV tuner and an FM tuner/receiver, these cable programs can be enjoyed in stereo over the TV's double-sided speakers as shown below.

Connection



Connection



Operation

Preparation

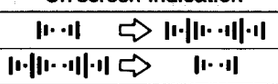
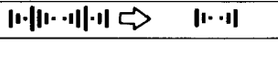
Make sure the following are properly set.

- Press TV/VIDEO button as many times as necessary so that the on-screen "EXT-A" indication is displayed.
- For over-the-air FM simulcasts, the CABLE selector should be OFF.
- For over-the-cable FM simulcasts, the CABLE selector should be ON, and depending on the channel to be viewed, the on-screen "AUX" indication should be as follows:
  (Press ANT/AUX button to change as necessary.)
  For regular cable TV channels:
  The indication should be off.
  For pay cable TV channels:
  The indication should be displayed.

1 Set the FM tuner to the frequency designated by the broadcaster.
2 Operate the TV the same as in usual TV viewing.

Enjoying Matrix Surround Effect

To enjoy sound reproduction with the atmosphere of a movie theater or a concert hall, press the MATRIX SURROUND button when the stereo sound is received. Press the button again to deactivate Matrix surround.

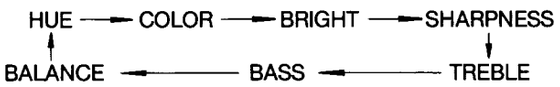
Matrix surround	On-screen indication
Turned ON	
Turned OFF	

Note

The surround function operates only for stereo sound.

Additional Picture and Sound Adjustment

1 Press SELECT consecutively until the on-screen display of the item you desire to adjust appears. The display will change as follows:



The display will disappear after a few seconds but will appear again when the next step is taken.

2 Press LEVEL +(R)/−(L) to adjust the selected item.

	Selected item	−(L) Left button	+(R) Right button
PICTURE ADJUST-MENT	HUE	Skin tones become purplish	Skin tones become greenish
	COLOR	For less color intensity	For more color intensity
	BRIGHT	For less brightness	For more brightness
	SHARP-NESS	For less sharpness	For more sharpness
SOUND ADJUST-MENT	TREBLE	To decrease treble response	To increase treble response
	BASS	To decrease bass response	To increase bass response
	BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

On-screen color-bar displays

When any of the above adjustments are made, a colored segmented bar appears on the screen to indicate the appropriate setting level.

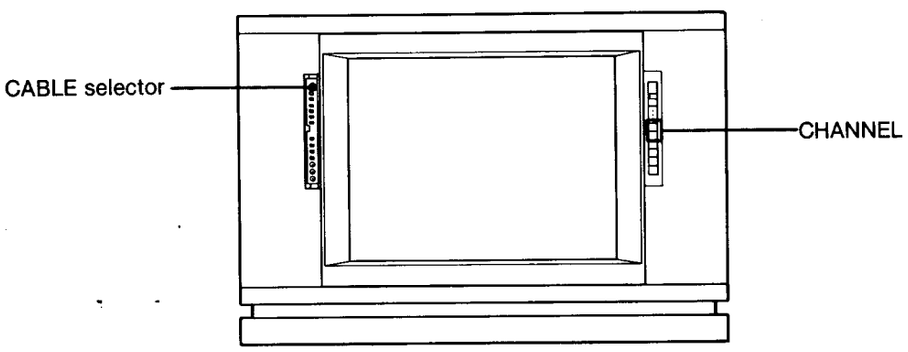
To clear the adjustment levels and restore the factory preset levels at once, press **RESET**. (A "RESET" indicator will appear for a few second.)

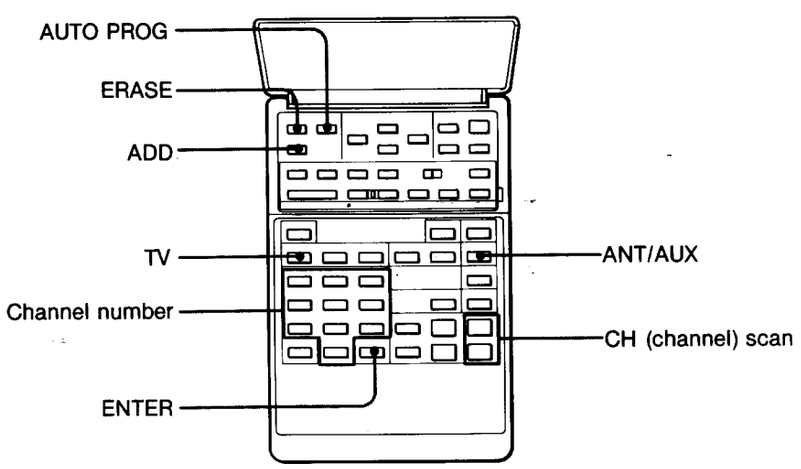
Presetting Channels

Use the supplied Remote Commander.

Both automatic and manual programming are available.
Automatic programming presets all the receivable channels automatically.
With manual programming, you can preset only the desired channels.
When the presetting has been completed, only the preset channels appear, in numerical sequence, when CH (CHANNEL) +/– are pressed.

Receivable channels of this unit are:
VHF: 2–13
UHF: 14–69
Cable: 1–125





Preparation

1 Turn on the TV.

2 If the "VIDEO1", "VIDEO2", "VIDEO3", "EXT-A" indication is displayed on the screen, press the TV button so that a channel number is displayed.

3 Set the CABLE selector to the proper mode, ON for cable TV programs and OFF for VHF and UHF programs.

4 Press the ANT/AUX button as necessary.
For VHF, UHF and regular cable TV channels, the "AUX" indication should be off.
For pay cable TV channels, the indication should be displayed.

Automatic Programming

Automatic programming presets receivable channels automatically.

Press AUTO PROG.
"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the unit's memory.
When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

Note

Some channels may not be preset, or some unnecessary channels may be preset because of the signal strength.
To add the channels that cannot be preset with automatic programming, or to erase unnecessary channels, follow the steps in "Manual Programming".
While in Auto Programming mode, the screen will be dark.

Manual Programming

Adding channels

1 Select the channel to be added by pressing the channel number buttons and then ENTER.
2 Press ADD on the Remote Commander.
"+" will appear on the left of the channel display on the screen, indicating that the channel has been added.

Repeat steps 1 and 2 for other channels to be added.

Erasing channels

1 Select the channel to be erased.
2 Press ERASE on the Remote Commander.
"–" will appear on the left of the channel display on the screen, indicating that the channel has been erased.

Repeat steps 1 and 2 for other channels to be erased.

Note

You cannot erase a VHF or UHF channel from the memory and retain the cable TV channel which has the same number, or vice versa. If either a VHF/UHF channel or a cable TV channel with the same number is to be kept in the memory, do not erase the number.

Cable TV Channel Chart*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

Check with your local cable TV company for more complete information on the available channels.

Number on this TV	1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corresponding CATV channel	A–8	A–7	A–6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q

31	32	33	34	35	36	37	38	39	.....	.....	93	94	95	96	97	98	99	100	101	102	.....	.....	123	124	125
R	S	T	U	V	W	W+1	W+2	W+3	.....	.....	W+57	W+58	A–5	A–4	A–3	A–2	A–1	W+59	W+60	W+61	.....	.....	W+82	W+83	W+84

* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Note

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.

Timer/Block

Available Functions

Internal clock	Once the internal clock is set, the current time will appear on the screen. It is necessary to set the clock correctly to activate the program start TIMER and channel BLOCK.
Program start TIMER	Makes a program of your choice appear on the screen automatically at the desired time.
Channel BLOCK	Blocks a channel from appearing on the screen for 12 hours. Use channel BLOCK to prevent children from watching undesirable programs.

The buttons used for the above functions are located on the Remote Commander.

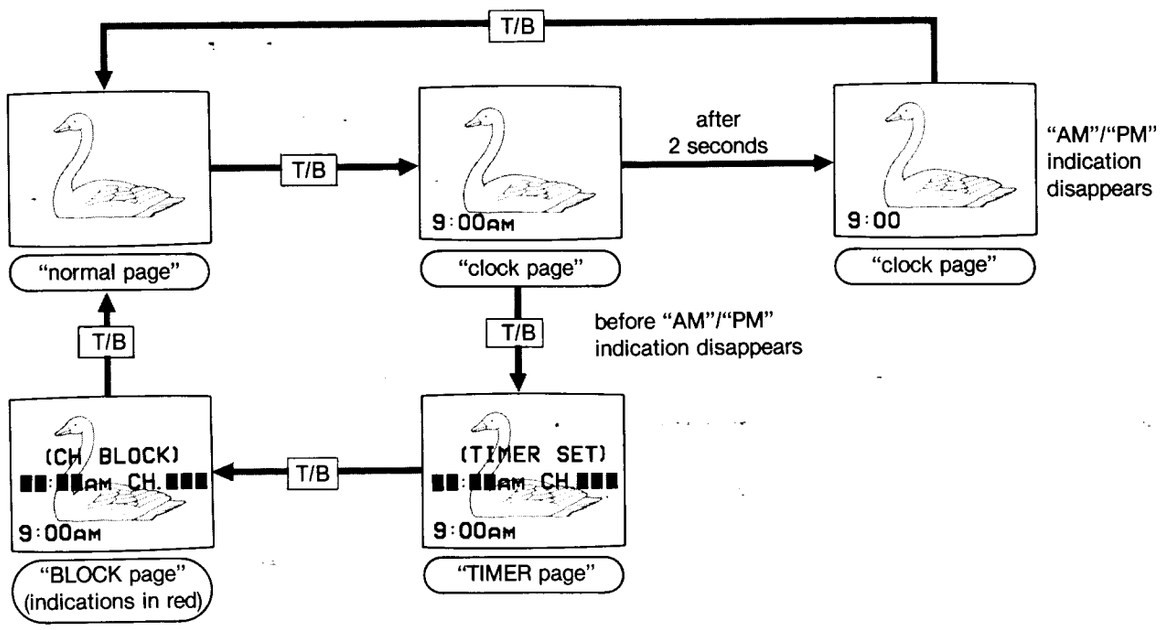
Note

- All settings will be erased from the unit's memory if the unit is unplugged, or if a power failure occurs.
- The TIMER and BLOCK will operate only if the clock is set correctly.
- If the TIMER and BLOCK are set for overlapping times on the same channel, the blocked channel will appear on the screen at the time set on the TIMER.

About the Indication of Timer/Block Setting

To set the internal clock, program start TIMER and channel BLOCK, you must summon the corresponding "pages": "clock page," "TIMER page" and "BLOCK page."

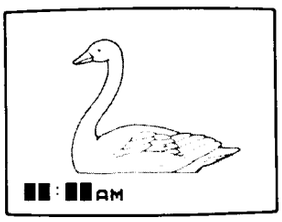
To change the "pages," press TIMER/BLOCK. T/B stands for "Press the TIMER/BLOCK button."



How to Set the Internal Clock

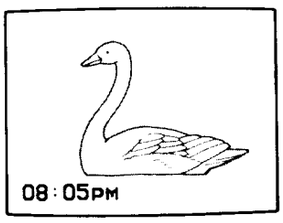
Example: To set the clock to 8:05 PM,

1 Press TIMER/BLOCK once to change from "normal page" to "clock page."

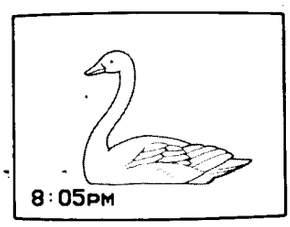


"clock page"

2 Press 0, 8, 0, 5, AM/PM (0 necessary).



3 If you have performed the operation correctly, press ENTER.
The numbers will "wink" to indicate that the clock has been set. (The 0 in front will disappear.)



If you have made a mistake, press CLEAR and return to step 2.

The "AM"/"PM" indication will disappear after 2 seconds.

- To summon "TIMER page," press TIMER/BLOCK before the "AM"/"PM" indication disappears.
  To return to "normal page," press TIMER/BLOCK after the "AM"/"PM" indication has disappeared.
- To reset the clock, summon "clock page" and press CLEAR before the "AM"/"PM" indication disappears. Then follow the steps above from step 2.

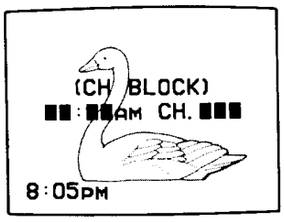
12:00 AM stands for midnight.
12:00 PM stands for noon.

How to Set the Channel Block

Make sure that the clock has been set correctly before setting the channel BLOCK.

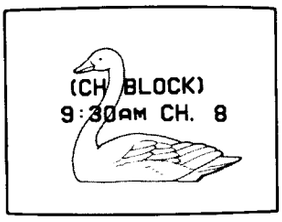
Example: To set the BLOCK for a program which begins at 9:30 AM on channel 8,

1 Press TIMER/BLOCK three times to change from "normal page" to "BLOCK page."



"BLOCK page"
(indications in red)

2 Press 0, 9, 3, 0, ENTER (0 necessary).
Numbers will "wink" to indicate that the time has been set.
Press 8, ENTER (0 not necessary).
Numbers will "wink" to indicate that the channel has been set.



The BLOCK has now been set.
If you have made a mistake, press CLEAR and return to step 2.

At the preset time, the picture of the selected channel will be blocked from view and the sound will be muted. A red "BLOCKED" indication will appear on the screen while the channel is blocked.
Normal reception will be resumed after 12 hours.
To return to normal reception while the channel is blocked, recall "BLOCK page" and press CLEAR.

The BLOCK setting blocks a specified channel for the same 12-hour period everyday.

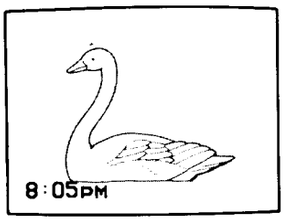
To clear BLOCK setting, summon "BLOCK page" and press CLEAR.
To reset, clear the setting and follow the steps above from step 2.

How to Set the Program Start Timer

Make sure that the clock has been set correctly before setting the program start TIMER.

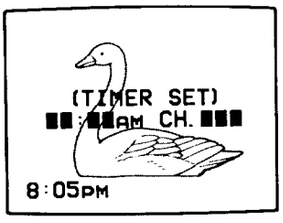
Example: To set the TIMER for a program which begins at 10:30 PM on channel 12,

1 Press TIMER/BLOCK once to change from "normal page" to "clock page."



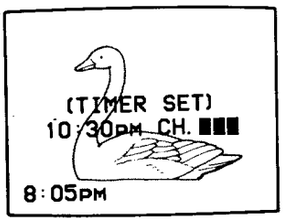
"clock page"

2 Press TIMER/BLOCK before the "AM"/"PM" indication disappears and summon "TIMER page."

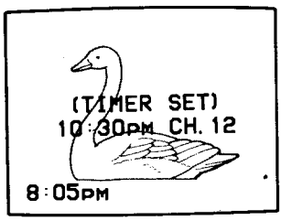


"TIMER page"

3 Press 1, 0, 3, 0, AM/PM, ENTER.
Numbers will "wink" to indicate that the time has been set.



4 Press 1, 2, ENTER (0 not necessary).
Numbers will "wink" to indicate that the channel has been set.



The TIMER lamp will light up to indicate that the TIMER has been set.
If you have made a mistake, press CLEAR and return to step 3.

At the preset time, the selected channel will appear on the screen and the TIMER lamp will go out. The TIMER will operate whether you are watching a TV program or a VCR playback, or even if you have turned off the TV.
If no button is pressed within 2 hours after the preset time, an "OFF" indication will appear on the screen for 1 minute. If a button is still not touched during the 1 minute, the TV will turn off automatically as a safety precaution.

The TIMER operates only once, but the time and the channel will remain in the unit's memory.
If you want to preset the same channel at the same time for a future date, press TIMER OFF/REPEAT. The TIMER lamp will light up to indicate that the TIMER has been reactivated.

To deactivate the TIMER, press TIMER OFF/REPEAT again so that the TIMER lamp goes out.
It is not necessary to summon "TIMER page" to use the TIMER OFF/REPEAT button. Furthermore, this button is effective even if the TV has been turned off.

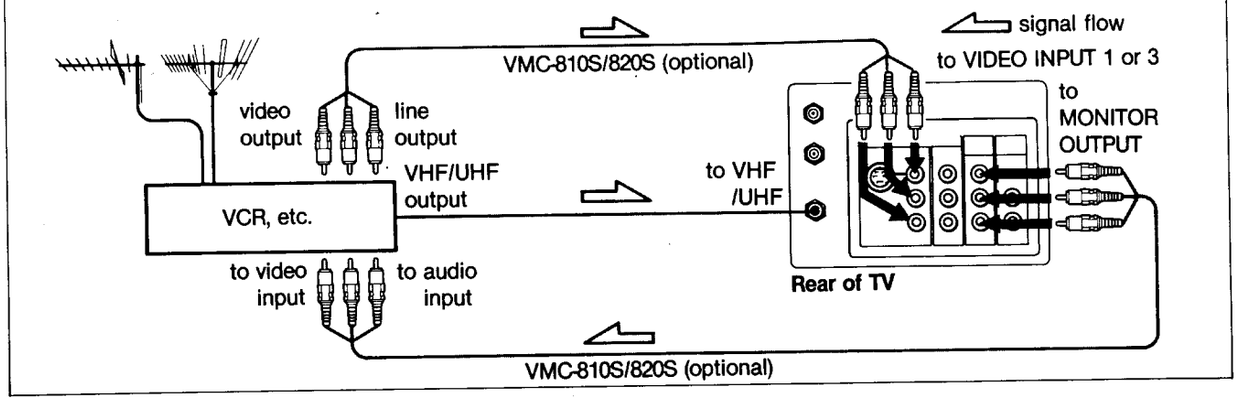
To clear the TIMER setting, summon "TIMER page" and press CLEAR.
To reset, clear the setting and follow the steps from step 3.

Applications with Optional Equipment

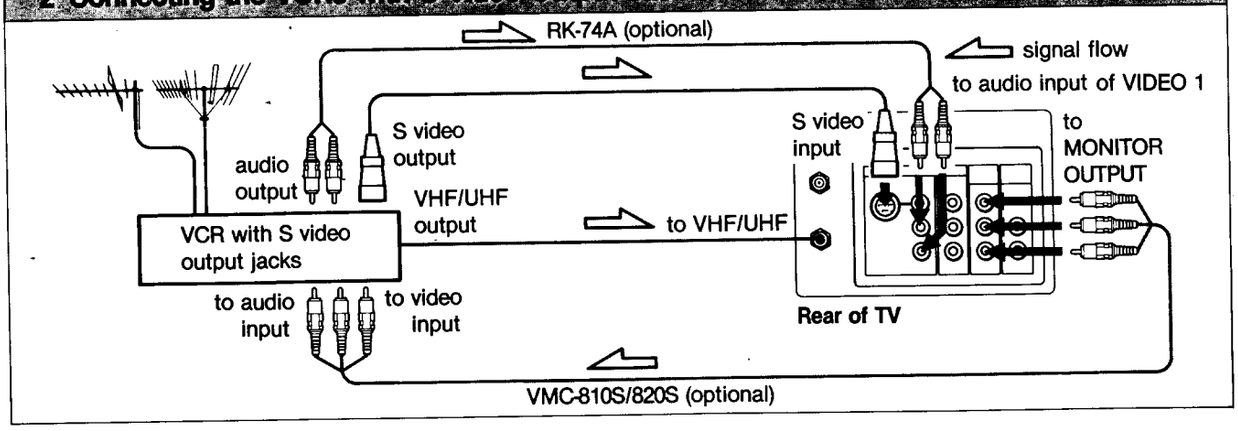
VCR Connection

With the following connection, you will be able to...
—View the playback of the video tapes
—Record TV programs
—Record a TV program while viewing another

1 Connecting the Ordinary VCRs



2 Connecting the VCRs with S Video Output Jack



A portable VCR, video camera recorder can be easily connected to the CAMCORDER IN/VIDEO 2 on the front panel.

About S video input

Video input and output signals may be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture (especially in color) quality.
This unit is equipped with an S video input jack through which these separated signals can be input directly.

Notes

- Up to three VCRs or other equipment can be connected to VIDEO INPUT 1, 3 jacks and CAMCORDER IN/VIDEO 2 jacks.
- When connecting a VCR and other equipment to the TV, connect the VCR to VIDEO 1.
- The signals input from VIDEO 1 are not output from MONITOR OUT.
- When connecting a monaural source to VIDEO 1, connect it to L jack. The monaural sound is heard from both speakers.

When connecting to S VIDEO INPUT

- Connect to audio input jacks of VIDEO 1.
- The picture from the video input jack of VIDEO 1 (phono jack) is not displayed.
- Select the VIDEO 1 mode to see the picture from S video.

Preparations

1 Turn on the TV.
2 Press the VIDEO/button or a mode select button so that the "VIDEO 1", "VIDEO 2", or "VIDEO 3" indication appears on the screen.
VIDEO 1: for equipment connected to VIDEO INPUT 1 and S VIDEO INPUT
VIDEO 2: for equipment connected to VIDEO INPUT 2
VIDEO 3: for equipment connected to VIDEO INPUT 3

Operation

For operation, refer to the instruction manual furnished with the VCR.

When using a Sony infrared remote control VCR, the VCR can be operated with the supplied Remote Commander.

1 Set the VTR/VIDEO 8 selector
—Sony Betamax VCR: VTR
—Sony 8mm VCR : Video 8
2 Press the VCR operation button on the Commander.

To return to the TV mode

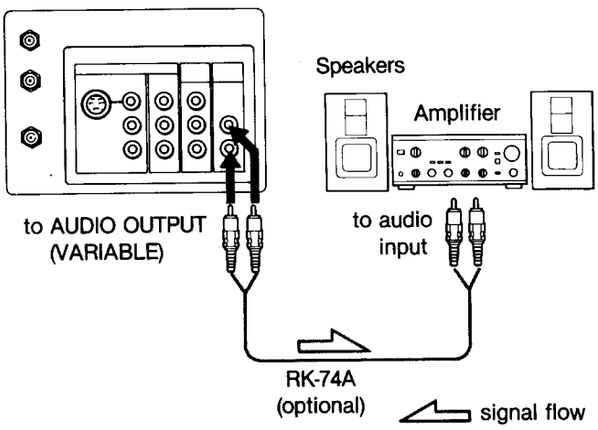
—Press the TV/VIDEO button on the TV until a channel number appears on the screen.
—Press the TV button on the Remote Commander.

When you cannot obtain a clear picture and/or sound

Make sure that the TV/VTR (program select) button on the VCR is set to TV. Re-select the desired channel with the buttons on the TV or TV Remote Commander.

To Monitor the TV or Connected VCR Sound through an Audio System

Rear of TV



Sound level adjustment

Keep the amplifier volume, bass and treble controls to certain positions (usually at the medium position) and adjust the level with the VOLUME buttons on the TV or the VOL buttons on the Commander, BASS and TREBLE controls to match the sound level of other audio equipment or to your preference.

Notes

Keep the VCR away from the TV, if the picure or sound is affected.
When no signal is fed through the VIDEO INPUT jacks even through the TV is in the video mode, "VIDEO" indication will appear on the screen.

Notes

When an audio system is connected to AUDIO OUTPUT, be sure to set the SPEAKER switch to OFF. The sound from the TV's speakers will be cut off.

Caution

Television programs, films, video tapes and other materials may be copyrighted.
Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

Antenna/Cable Connection

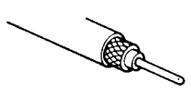
Outdoor Antenna Connection

If you cannot obtain satisfactory reception with an indoor antenna, using an outdoor antenna may be necessary.
Cable TV reception is only possible by connecting a cable supplied by your local cable operator.
Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See A or B below.)

A Combination VHF/UHF antenna,* VHF antenna, UHF antenna or CATV cable.

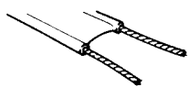
Select the proper connector according to the cable type.

When the cable is a 75-ohm coaxial type (round)

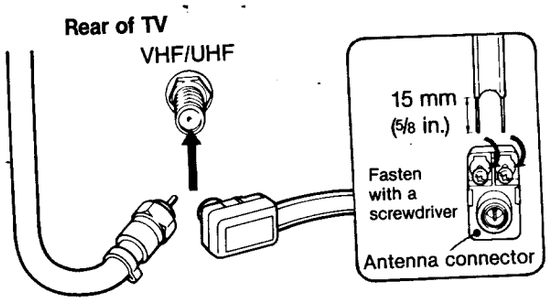


Use an optional F-type connector.

When the cable is a 300-ohm ribbon type lead-in (flat)



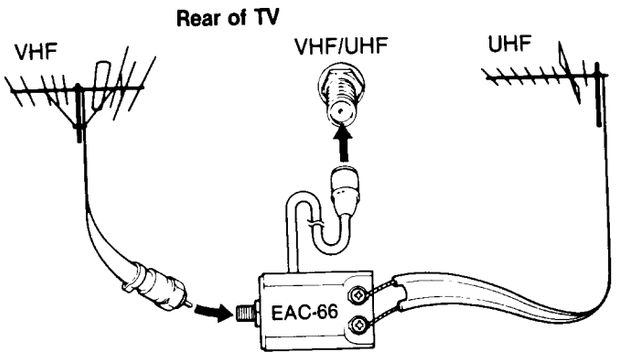
Attach the antenna connector which was fixed to the indoor antenna.



* Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

B When both VHF and UHF antennas are connected

Prepare the VHF antenna end using the appropriate connector as illustrated in A.
Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.



Notes

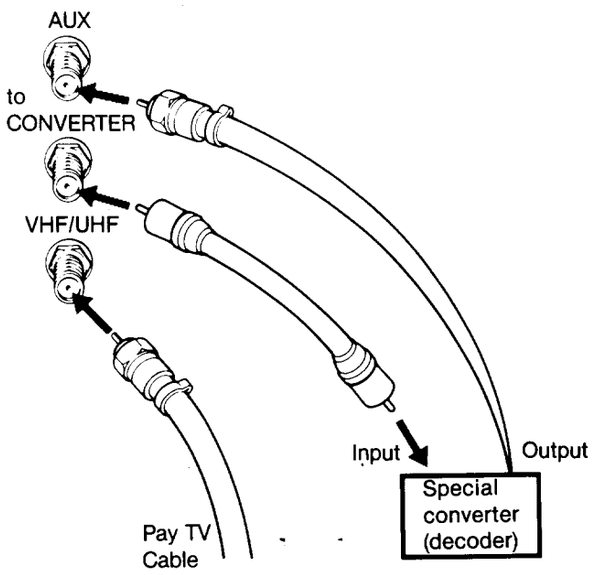
When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W + 1).

Note to CATV system installer in the U.S.A.

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particualr, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

C Cable with a special converter (decoder)

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders)* in addition to the normal cable connection. Connect the converter (decoder) with a 75-ohm coaxial cable (optional).

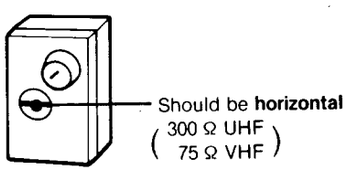


* The special converter (decoder) will be supplied by the cable company.

If the supplied antenna connector has a slot as illustrated below:

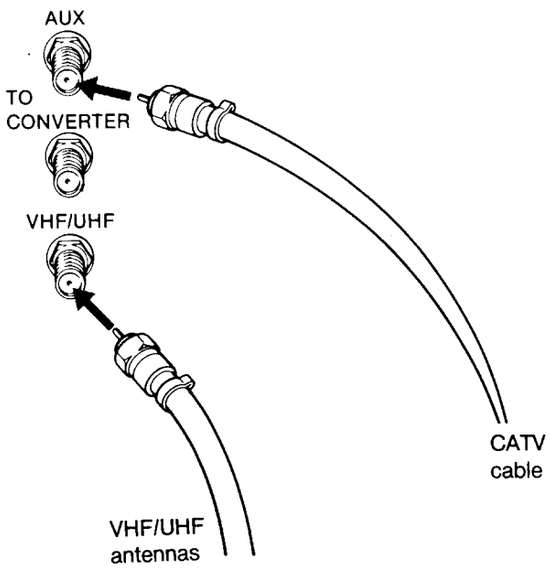
The antenna connector can be used also as a U/V mixer.

When connecting both 75-ohm VHF and 300-ohm UHF antennas, or 300-ohm UHF antenna only:



To turn the slot, use a coin or a similar object.

D When both VHF/UHF antennas and a CATV cable are connected



Note

In this case, do not connect anything to the TO CONVERTER terminal.

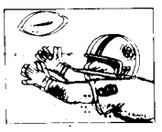
Specifications

Television system	American TV standard
Channel coverage	VHF: 2–13 UHF: 14–69 Cable TV: 1–125
Picture tube	Microblack Trinitron tube **32-inch picture measured diagonally** 34-inch picture tube measured diagonally
Input	VIDEO INPUT 1, 2 and 3 (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 500 mVrms (100% modulation) Impedance: 47 kilohms S VIDEO INPUT (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms
Output	MONITOR OUTPUT (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 500 mVrms (100% modulation) Impedance: 10 kilohms AUDIO OUTPUT (VARIABLE) (phono jacks) More than 408 mVrms at the maximum volume setting (variable) (100% modulation) Impedance: 10 kilohms
Power requirements	120 V AC, 60 Hz
Power consumption	185W (max.) 1W (in standby condition)
Accessories supplied	Remote Commander RM-755 with 2 size AA batteries Antenna connector
Optional accessories	U/V mixer EAC-66 Connecting cord VMC-810S/820S RK-74A

Design and specifications subject to change without notice.

Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

	SYMPTOM	CHECK AND ADJUST
GENERAL	**Poor or no picture (screen not lit), good sound**	• Adjust PICTURE. • Adjust BRIGHT. • Check antenna/cable connections.
	Good picture, no sound	• Press VOLUME +. • Release MUTING on the Remote Commander. • Check that the MTS button is set correctly. • Check that the TV/VIDEO button or mode select button is set correctly. • Set the SPEAKER switch to ON.
	No picture (screen not lit), no sound	• Is POWER switched on? Power in outlet? • Check that the TV/VIDEO button is set correctly.
	No color	• Is it a color program? • Adjust COLOR.
	Snow and noise only	• Is it an active or the correct channel? • Check the CABLE selector setting. • Check antenna/cable connections. • Check that the ANT/AUX button is set correctly.
	Dotted lines or stripes	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust antenna for minimum interference.
	 **Double images or ghosts**	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.
	Try another channel. It could be station trouble.	
TIMER/BLOCK	**Program start TIMER and/or channel BLOCK does not operate properly.**	• Is the clock set correctly? • Is the setting correct? • Have you unplugged the unit? Has a power failure occurred? If so, the settings have been erased.

If the problem persists, contact your nearest service facility.